What is claimed is:

1. A resilient, polymeric fiber liner insulation, comprising:

a resilient insulation blanket core of polymeric fibers; the blanket core having a length and a width; the blanket core having first and second major surfaces defined by the length and width of the blanket; the blanket core having a thickness of about 0.5 inches or greater; the blanket core having a density between 1 pcf and 3 pcf; the polymeric fibers being between 60% and 90% by weight standard polymeric staple fibers and/or flame retardant polymeric staple fibers and between 10% and 40% by weight lofting and bonding polymeric fibers; the polymeric fibers having an average denier between 3 and 15; the polymeric fibers having an average length between 0.5 and 4.0 inches;

a surface layer coextensive and integral with the first major surface of the blanket core; the surface layer being less permeable than the second major surface of the blanket core and having a permeability selected to provide the polymeric fiber liner insulation with a higher noise reduction coefficient than an identical polymeric fiber insulation blanket without the surface layer; and

the polymeric fiber liner insulation having a flame spread/smoke developed index of $\leq$25/50.

2. The polymeric fiber liner insulation according to claim 1, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

3. The polymeric fiber liner insulation according to claim 1, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

4. The polymeric fiber liner insulation according to claim 1, wherein:

the surface layer of the first major surface of the blanket core is a polymeric coating; and the polymeric coating has a dry application weight of between 8 and 20 g/ft^2.

5. The polymeric fiber liner insulation according to claim 4, wherein:

the polymeric coating is a multilayered polymeric coating.

6. The polymeric fiber liner insulation according to claim 4, wherein:

the polymeric coating is an acrylic coating.

7. The polymeric fiber liner insulation according to claim 1, wherein:

the polymeric fibers comprise thermoplastic polymeric staple fibers that, at and adjacent the first major surface of the blanket core, have been melted and consolidated to form the surface layer of the first major surface of the blanket core.

8. The polymeric fiber insulation blanker liner according to claim 7, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

9. The polymeric fiber liner insulation according to claim 7, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

10. The polymeric fiber liner insulation according to claim 1, wherein:

the polymeric fibers comprise between 60% and 90% by weight standard polyester staple fibers; and between 10% and 40% by weight sheathed polyester lofting and bonding fibers.

11. The polymeric fiber insulation blanker liner according to claim 10, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

12. The polymeric fiber liner insulation according to claim 10, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

13. The polymeric fiber liner insulation according to claim 10, wherein:

the surface layer of the first major surface of the blanket core is a polymeric coating; and the polymeric coating has a dry application rate of between 8 and 20 g/ft^2.

14. The polymeric fiber liner insulation according to claim 13, wherein:

the polymeric coating is a multilayered polymeric coating.

15. The polymeric fiber liner insulation according to claim 13, wherein:

the polymeric coating is an acrylic coating.

16. The polymeric fiber liner insulation according to claim 10, wherein:

the polymeric fibers comprise thermoplastic polymeric staple fibers that, at and adjacent the first major surface of the blanket core, have been melted and consolidated to form the surface layer of the first major surface of the blanket core.

17. The polymeric fiber insulation blanker liner according to claim 16, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

18. The polymeric fiber liner insulation according to claim 16, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

19. The polymeric fiber liner insulation according to claim 1, wherein:

the polymeric fibers comprise between 70% and 80% by weight standard polymeric staple fibers and between 20% and 30% by weight lofting and bonding polymeric fibers.

20. The polymeric fiber insulation blanker liner according to claim 19, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

21. The polymeric fiber liner insulation according to claim 19, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

22. The polymeric fiber liner insulation according to claim 19, wherein:

the surface layer of the first major surface of the blanket core is a polymeric coating; and the polymeric coating has a dry application rate of between 8 and 20 g/ft^2.

23. The polymeric fiber liner insulation according to claim 22, wherein:

the polymeric coating is a multilayered polymeric coating.

24. The polymeric fiber liner insulation according to claim 22, wherein:

the polymeric coating is an acrylic coating.

25. The polymeric fiber liner insulation according to claim 19, wherein:

the polymeric fibers comprise thermoplastic polymeric staple fibers that, at and adjacent the first major surface of the blanket core, have been melted and consolidated to form the surface layer of the first major surface of the blanket core.

26. The polymeric fiber insulation blanker liner according to claim 25, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

27. The polymeric fiber liner insulation according to claim 25, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

28. The polymeric fiber liner insulation according to claim 19, wherein:

the polymeric fibers comprise between 70% and 80% by weight standard polyester staple fibers; and between 20% and 30% by weight sheathed polyester lofting and bonding fibers.

29. The polymeric fiber insulation blanker liner according to claim 28, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

30. The polymeric fiber liner insulation according to claim 28, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

31. The polymeric fiber liner insulation according to claim 28, wherein:

the surface layer of the first major surface of the blanket core is a polymeric coating; and the polymeric coating has a dry application rate of between 8 and 20 g/ft^2.

32. The polymeric fiber liner insulation according to claim 31, wherein:

the polymeric coating is a multilayered polymeric coating.

33. The polymeric fiber liner insulation according to claim 31, wherein:

the polymeric coating is an acrylic coating.

34. The polymeric fiber liner insulation according to claim 28, wherein:

the polymeric fibers comprise thermoplastic polymeric staple fibers that, at and adjacent the first major surface of the blanket core, have been melted and consolidated to form the surface layer of the first major surface of the blanket core.

35. The polymeric fiber insulation blanker liner according to claim 34, wherein:

the surface layer of the first major surface of the blanket core has a porosity between 200 and 1000 Mks Rayls.

36. The polymeric fiber liner insulation according to claim 35, wherein:

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released.

37. A resilient, polymeric fiber liner insulation, comprising:

a resilient insulation blanket core of polymeric fibers; the blanket core having a length and a width; the blanket core having first and second major surfaces defined by the length and width of the blanket; the blanket core having a thickness of about 0.5 inches or greater; the blanket core having a density between 1 pcf and 3 pcf; the polymeric fibers being between 60% and 90% by weight standard polymeric staple fibers and/or flame retardant polymeric staple fibers and between 10% and 40% by weight lofting and bonding polymeric fibers; the polymeric fibers having an average denier between 3 and 15; the polymeric fibers having an average length between 0.5 and 4.0 inches;

a surface layer coextensive and integral with the first major surface of the blanket core; the surface layer being less permeable than the second major surface of the blanket core and being impermeable to water;

the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released; and

the polymeric fiber liner insulation having a flame spread/smoke developed index of $\leq$ 25/50.

38. The polymeric fiber, liner insulation according to claim 37, wherein:

the surface layer has a permeability selected to provide the polymeric fiber liner insulation with a higher noise reduction coefficient than an identical polymeric fiber insulation blanket without the surface layer

39. A method of making a polymeric fiber liner insulation with a flame spread/smoke developed index of $\leq$25/50, comprising:

forming a resilient insulation blanket core of polymeric fibers; the blanket having a length, a width and a thickness; the blanket having first and second major surfaces defined by the length and width of the blanket; the polymeric fibers being between 60% and 90% by weight standard polymeric staple fibers and between 10% and 40% by weight polymeric lofting and bonding fibers that have a lower softening point temperature than a remainder of the polymeric fibers of the blanket; the polymeric lofting and bonding fibers being intermingled with the remainder of the polymeric fibers of the blanket; the polymeric fibers having an average denier between 3 and 15; the polymeric fibers having an average length between 0.5 and 4.0 inches;

heating the blanket to the softening point temperature of the polymeric lofting and bonding fibers, to make surfaces of the polymeric lofting and bonding fibers tacky, and subsequently cooling the insulation blanket core below the softening point temperature of the polymeric lofting and bonding fibers whereby the polymeric lofting and bonding fibers bond the polymeric fibers of the insulation blanket core together at points of fiber intersection within the insulation blanket core; the insulation blanket core formed having a density between 1 pcf and 3 pcf and a thickness of about 0.5 inches or greater; and the insulation blanket core formed having a resilience whereby the polymeric fiber liner insulation, after being compressed to one third or less of an initial thickness of the polymeric fiber liner insulation, substantially recovers to the initial thickness when compressive forces are released; and

forming a surface layer on the first major surface of the insulation blanket core that is less permeable than the second major surface of the insulation blanket core.

40. The method of making a polymeric fiber liner insulation according to claim 39, wherein:

the standard polymeric staple fibers are standard thermoplastic polymeric staple fibers; and the surface layer of first major surface of the insulation blanket core is formed by heating, melting, and consolidating the polymeric fibers of the insulation blanket core at and adjacent the first major surface of the insulation blanket core into the surface layer and cooling the surface layer.

41. The method of making a polymeric fiber liner insulation according to claim 40, wherein:

the surface layer of the first major surface of the insulation blanket core is formed by applying a polymeric coating to the first major surface of the insulation blanket core.

42. The method of making a polymeric fiber liner insulation according to claim 41, wherein:

the polymeric coating applied has a dry application rate of between 8 and 20 g/ft^2; and the polymeric coating is an acrylic coating.

43. The method of making a polymeric fiber liner insulation according to claim 39, wherein:

the polymeric fibers forming the blanket include between 70% and 80% by weight standard polyester staple fibers and between 20% and 30% by weight polyester lofting and bonding fibers.

44. The method of making a polymeric fiber liner insulation according to claim 43, wherein:

the standard polymeric staple fibers are standard thermoplastic polymeric staple fibers; and the surface layer of first major surface of the insulation blanket core is formed by heating, melting, and consolidating the polymeric fibers of the insulation blanket core at and adjacent the first major surface of the insulation blanket core into the surface layer and cooling the surface layer.

44. The method of making a polymeric fiber liner insulation according to claim 43, wherein:

the surface layer of the first major surface of the insulation blanket core is formed by applying a polymeric coating to the first major surface of the insulation blanket core.

45. The method of making a polymeric fiber liner insulation according to claim 44, wherein:

the polymeric coating applied has a dry application rate of between 8 and 20 g/ft^2; and the polymeric coating is an acrylic coating.

46. The method of making a polymeric fiber liner insulation according to claim 43, wherein:

the surface layer of the first major surface of the insulation blanket core is formed with a permeability selected to provide the polymeric fiber liner insulation with a higher noise reduction coefficient than an identical polymeric fiber insulation blanket without the surface layer.

47. The polymeric fiber liner insulation according to claim 43, wherein:

the surface layer of the first major surface of the insulation blanket core is water impermeable.